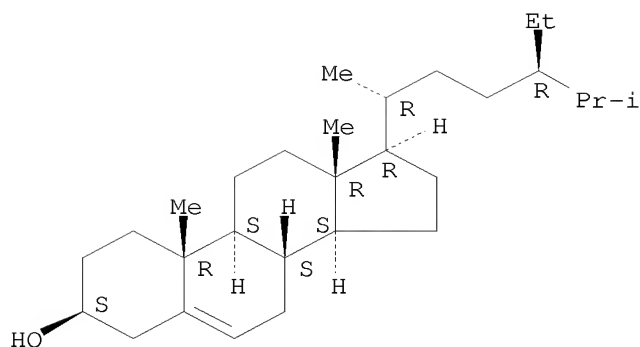


L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN  
 RN 83-46-5 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN Stigmast-5-en-3-ol, (3 $\beta$ )- (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Nimbosterol (6CI)  
 CN Stigmast-5-en-3 $\beta$ -ol (8CI)  
 OTHER NAMES:  
 CN (-)- $\beta$ -Sitosterol  
 CN (24R)-Ethylcholest-5-en-3 $\beta$ -ol  
 CN (24R)-Stigmast-5-en-3 $\beta$ -ol  
 CN  $\alpha$ -Dihydrofucosterol  
 CN  $\alpha$ -Phytosterol  
 CN  $\beta$ -Sitosterin  
 CN  $\beta$ -Sitosterol  
 CN  $\Delta$ 5-Stigmasten-3 $\beta$ -ol  
 CN 22,23-Dihydrostigmasterol  
 CN 24 $\alpha$ -Ethylcholesterol  
 CN Angelicin  
 CN Angelicin (steroid)  
 CN Azuprostat  
 CN Betaprost  
 CN Cinchol  
 CN Cupreol  
 CN Harzol  
 CN NSC 18173  
 CN NSC 49083  
 CN NSC 8096  
 CN Prostrasal  
 CN Quebrachol  
 CN Rhammol  
 CN Rhamnol  
 CN Sito-Lande  
 CN Sitosterol  
 CN SKF 14463  
 CN Sobatum  
 CN Stigmasterol, 22,23-dihydro-  
 FS STEREOSEARCH  
 DR 8003-23-4, 15764-35-9, 76772-70-8, 182512-23-8  
 MF C29 H50 O  
 CI COM  
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOSIS,  
 BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX,  
 CHEMLIST, CSCHEM, DDFU, DETHERM\*, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB,  
 IPA, MRCK\*, MSDS-OHS, NAPRALERT, PIRA, PROMT, PS, RTECS\*, SCISEARCH,  
 SPECINFO, SYNTHLINE, TOXCENTER, ULIDAT, USPAT2, USPATFULL, USPATOLD,  
 VETU  
 (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, EINECS\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

13643 REFERENCES IN FILE CA (1907 TO DATE)  
 245 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 13743 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 12 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus  
 COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
19.52	19.73

FULL ESTIMATED COST

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FILE COVERS 1907 - 30 Jul 2008 VOL 149 ISS 5  
 FILE LAST UPDATED: 29 Jul 2008 (20080729/ED)

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=> s l3 <> or angelicin?

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 See HELP TRANSFER and HELP ANALYZE for Details

COST IN U.S. DOLLARS  
 FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
0.48	20.21

FILE 'REGISTRY' ENTERED AT 16:47:36 ON 30 JUL 2008  
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SET COMMAND COMPLETED

SEL L3 1-  
L4 SEL L3 1- CHEM : 36 TERMS

SET SMARTSELECT OFF  
SET COMMAND COMPLETED

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	12.11	32.32

FILE 'CAPLUS' ENTERED AT 16:47:36 ON 30 JUL 2008  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
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S L4 OR ANGELICIN?

L6 662 ANGELICIN?  
17958 L5 OR ANGELICIN?

=> s thalassaemia or thalassemia or e4, e5  
191 THALASSAEMIA  
11 THALASSAEMIAS  
202 THALASSAEMIA  
(THALASSAEMIA OR THALASSAEMIAS)  
5965 THALASSEMIA  
399 THALASSEMIAS  
6023 THALASSEMIA  
(THALASSEMIA OR THALASSEMIAS)  
10046 "ANEMIA (DISEASE)"/CT  
4543 THALASSEMIA/CT  
L7 15736 THALASSAEMIA OR THALASSEMIA OR ("ANEMIA (DISEASE)"/CT OR THALASSEMIA/CT)

=> s l7 and l6  
L8 13 L7 AND L6

=> focus  
PROCESSING COMPLETED FOR L8  
L9 13 FOCUS L8 1-

=> d ibib abs hitstr 1-13

L9 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2004:120717 CAPLUS  
DOCUMENT NUMBER: 140:157454  
TITLE: Use of angelicin and its structural analogs  
for the treatment of thalassemia  
INVENTOR(S): Bianchi, Nicoletta; Borgatti, Monica; Gambari,  
Roberto; Lampronti, Ilaria  
PATENT ASSIGNEE(S): Universita' Degli Studi Di Ferrara, Italy;  
Associazione Veneta Per La Lotta Alla Talassemia  
SOURCE: PCT Int. Appl., 18 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent

LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004012729	A1	20040212	WO 2003-IB3462	20030730
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003249472	A1	20040223	AU 2003-249472	20030730
EP 1545506	A1	20050629	EP 2003-766580	20030730
EP 1545506	B1	20080220		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
AT 386513	T	20080315	AT 2003-766580	20030730
US 20060111433	A1	20060525	US 2005-522737	20051012
PRIORITY APPLN. INFO.:			IT 2002-TO684	A 20020731
			WO 2003-IB3462	W 20030730

AB The invention describes the use of angelicin and its structural analogs for the preparation of a medicament for the therapeutic treatment of beta-thalassemia. A structural analog which is particularly preferred for this purpose is bergapten.

L9 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:786184 CAPLUS

DOCUMENT NUMBER: 140:157093

TITLE: Accumulation of  $\gamma$ -globin mRNA in human erythroid cells treated with angelicin

AUTHOR(S): Lampronti, Ilaria; Bianchi, Nicoletta; Borgatti, Monica; Fibach, Eitan; Prus, Eugenia; Gambari, Roberto  
 CORPORATE SOURCE: Department of Biochemistry and Molecular Biology, University of Ferrara, Ferrara, Italy

SOURCE: European Journal of Haematology (2003), 71(3), 189-195  
 CODEN: EJHAEC; ISSN: 0902-4441

PUBLISHER: Blackwell Publishing Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The aim of the present study was to determine whether angelicin is able to increase the expression of  $\gamma$ -globin genes in human erythroid cells. Angelicin is structurally related to psoralens, a well-known chemical class of photosensitizers used for their antiproliferative activity in treatment of different skin diseases (i.e., psoriasis and vitiligo). To verify the activity of angelicin, we employed two exptl. cell systems, the human leukemic K562 cell line and the two-phase liquid culture of human erythroid progenitors isolated from normal donors. The results of our investigation suggest that angelicin, compared with cytosine arabinoside, mithramycin and cisplatin, is a powerful inducer of erythroid differentiation and  $\gamma$ -globin mRNA accumulation of human leukemia K562 cells. In addition, when normal human erythroid precursors were cultured in the presence of angelicin, increases of  $\gamma$ -globin mRNA accumulation and fetal Hb (HbF) production, even higher than those obtained using hydroxyurea, were detected. These results could have practical relevance, as pharmacol.-mediated regulation of the expression of human  $\gamma$ -globin genes, leading to HbF induction, is considered a potential therapeutic approach in hematol. disorders, including  $\beta$ -thalassemia and sickle cell anemia.

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS

L9 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:689283 CAPLUS  
 DOCUMENT NUMBER: 125:309047  
 ORIGINAL REFERENCE NO.: 125:57669a,57672a  
 TITLE: Erythropoietin liposomal formulation  
 INVENTOR(S): Nagai, Tsuneji; Yonetani, Yoshe  
 PATENT ASSIGNEE(S): Chugai Pharmaceutical Co Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 08231417	A	19960910	JP 1995-226610	19950904
JP 3850468	B2	20061129		

PRIORITY APPLN. INFO.: JP 1994-327067 A 19941228

AB Erythropoietin (Epo)-containing liposomes are prepared by an evaporation method which

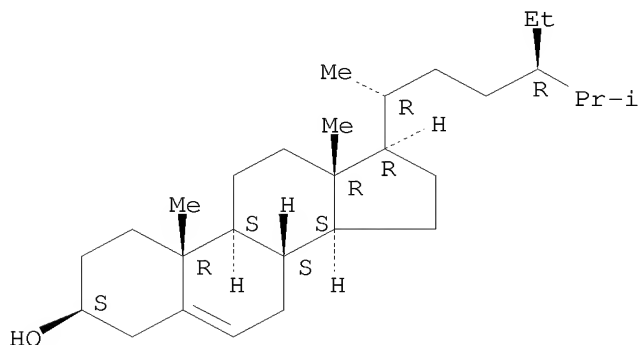
has high incorporation efficiency and protects Epo from decreases in activity. A reversed-phase evaporation method is used to enclose Epo in a phospholipid (lecithin, cephalin, sphingomyelin, dipalmitoylphosphatidylcholine (DPPC), etc.) membrane that contains sterol-type lipids or sterol glycosides such as .beta.-sitosterol, campesterol, stigmasterol, brassicasterol, or cholesterol. Thus, liposomes are prepared from DPPC (105  $\mu$ M) and SS (soybean sterol, made up of .beta.-sitosterol 49.9%, campesterol 29.1%, stigmasterol 13.8%, and brassicasterol 7.2%) or SG (monoglycosides of SS) (30  $\mu$ M) (7:2 mol ratio). Injected s.c. to rats, this formulation significantly increased the number of circulating erythrocytes 2 days later. Such liposomes are suitable for treatment of anemia in humans (no data).

IT 83-46-5,  $\beta$  -Sitosterol  
 RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
 (erythropoietin liposomal formulation for treatment of anemia)

RN 83-46-5 CAPLUS

CN Stigmast-5-en-3-ol, (3 $\beta$ )- (CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:183297 CAPLUS  
 DOCUMENT NUMBER: 108:183297  
 ORIGINAL REFERENCE NO.: 108:30033a,30036a  
 TITLE: Method and kit for rapid detection of nucleic acid

INVENTOR(S): sequences in a sample by labeling the sample  
Dattagupta, Nanibhushan; Rae, Peter M. M.; Rabin,  
Daniel U.; Huguenel, Edward D.  
PATENT ASSIGNEE(S): Molecular Diagnostics, Inc., USA  
SOURCE: Eur. Pat. Appl., 29 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 235726	A2	19870909	EP 1987-102577	19870224
EP 235726	A3	19890510		
EP 235726	B1	19930519		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE				
NO 8700613	A	19870907	NO 1987-613	19870217
CA 1295535	C	19920211	CA 1987-530235	19870220
AT 89606	T	19930615	AT 1987-102577	19870224
FI 8700923	A	19870906	FI 1987-923	19870303
DK 8701120	A	19870906	DK 1987-1120	19870304
ZA 8701554	A	19871230	ZA 1987-1554	19870304
AU 8769723	A	19870910	AU 1987-69723	19870305
AU 599083	B2	19900712		
JP 62265999	A	19871118	JP 1987-51169	19870305
CA 1314794	C	19930323	CA 1987-553597	19871204
US 5348855	A	19940920	US 1991-772625	19911004
PRIORITY APPLN. INFO.:				
			US 1986-836378	A 19860305
			US 1986-943006	A 19861229
			EP 1987-102577	A 19870224
			US 1987-24643	A 19870311

AB A method for detecting  $\geq 1$  microorganism or polynucleotide sequence from eukaryotic sources in a nucleic acid-containing sample comprises (a) labeling the nucleic acids in the test sample; (b) immobilizing an oligonucleotide or a single-stranded nucleic acid of  $\geq 1$  known microorganism or sequences from eukaryotic sources to make  $\geq 1$  probe; (c) contacting, under hybridization conditions, the labeled single-stranded sample nucleic acid and the immobilized probe to form a hybridized labeled nucleic acid; and (d) assaying for the hybridized nucleic acid by detecting the label. A kit comprises immobilized probe, reagent for labeling the sample nucleic acids, reagent for denaturing the nucleic acids, and hybridization reagents. Urine samples from patients with suspected urinary tract infections were centrifuged, treated with NaOH, and heated to 100° to lyse the cells. The suspension was diluted with Na borate buffer and neutralized to pH 7. Biotin-PEG-angelicin (preparation described) was added and the mixture was irradiated with a long-wavelength UV lamp for 15 min. The irradiated sample was added to hybridization reagents and hybridization was conducted with probes (whole genomic DNA of *Escherichia coli*, *Klebsiella pneumoniae*, *Proteus vulgaris*, etc.) immobilized onto nitrocellulose paper. Hybridization was detected by an immunogold assay with affinity-isolated goat anti-biotin antibody and Ag enhancement. A spot of human DNA was also present on the paper for detection of leukocytes.

L9 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:158569 CAPLUS

DOCUMENT NUMBER: 148:397073

TITLE: Induction of  $\gamma$ -globin mRNA, erythroid differentiation and apoptosis in UVA-irradiated human erythroid cells in the presence of furocoumarin derivatives

AUTHOR(S): Viola, Giampietro; Vedaldi, Daniela; Dall'Acqua, Francesco; Fortunato, Elena; Basso, Giuseppe; Bianchi, Nicoletta; Zuccato, Cristina; Borgatti, Monica; Lampronti, Ilaria; Gambari, Roberto

CORPORATE SOURCE: Department of Pharmaceutical Sciences, University of  
Padova, Padua, 35131, Italy  
SOURCE: Biochemical Pharmacology (2008), 75(4), 810-825  
CODEN: BCPCA6; ISSN: 0006-2952  
PUBLISHER: Elsevier B.V.  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Psoralens, also known as furocoumarins, are a class of photosensitizers largely used in the therapy of various skin diseases. In this study we have evaluated the combined effects of UVA irradiation and furocoumarins derivs. on (a) erythroid differentiation and apoptosis of human leukemia K562 cells and (b) globin gene expression in cultures of human erythroid progenitors derived from the peripheral blood. To prove the activity of a series of linear and angular furocoumarins derivs., we employed the human leukemia K562 cell line and the two-phase liquid culture procedure for growing erythroid progenitors. Quant. real-time reverse transcription polymerase-chain assay (Q-RT-PCR) was employed for quantification of the accumulation of globin mRNAs. The results obtained demonstrate that both linear and angular furocoumarins are strong inducers of erythroid differentiation of K562 cells. From a preliminary screening, we have selected two derivs., 5-methoxypsoralen (5-MOP) and trimethylangelicin (TMA), for which we have investigated their mechanism of action. The cell cycle anal. showed that these derivs. induce, after irradiation, a cell cycle arrest in the G2/M phase, followed by apoptosis. Mitochondrial depolarization and caspases activation seem to be involved in the mechanism of cell death. In erythroid precursor cells, psoralens in combination with UVA irradiation, stimulate at very low concns. a preferential increase of  $\gamma$ -globin mRNA. Altogether, these data suggest that psoralen derivs. warrant further evaluation as potential therapeutic drugs in  $\beta$ -thalassemia and sickle cell anemia.

REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1989:550062 CAPLUS  
DOCUMENT NUMBER: 111:150062  
ORIGINAL REFERENCE NO.: 111:24949a,24952a  
TITLE: Nucleic acid sequence determination by hybridization probe and its use in the identification of microorganisms and prokaryotic or eukaryotic DNA and in clinical diagnosis  
INVENTOR(S): Dattagupta, Nanibhushan; Rabin, Daniel; Rae, Peter; Huguenel, Edward  
PATENT ASSIGNEE(S): Molecular Diagnostics, Inc., USA  
SOURCE: Eur. Pat. Appl., 31 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
EP 281927	A2	19880914	EP 1988-103221	19880303
EP 281927	A3	19910417		
EP 281927	B1	19950628		
R: CH, DE, ES, FR, GB, GR, IT, LI, NL, SE				
CA 1314794	C	19930323	CA 1987-553597	19871204
AU 8812151	A	19880915	AU 1988-12151	19880223
AU 601021	B2	19900830		
JP 63313598	A	19881221	JP 1988-56517	19880311
US 5348855	A	19940920	US 1991-772625	19911004
PRIORITY APPLN. INFO.:			US 1987-24643	A 19870311
			US 1986-836378	B2 19860305

AB A method for the detection and identification of microorganisms or nucleic acid sequences in a test sample comprises: (1) labeling the nucleic acids in the sample, (2) contacting the labeled nucleic acids with  $\geq 1$  immobilized probe containing complementary nucleic acids under hybridization conditions, and (3) detecting the label. The labeling compound 4'-biotinyl-PEG-4,5'-dimethylangelicin (I) was prepared. In  $\alpha$ -thalassemia diagnosis, a test sample containing nucleic acid was dissolved in 10 mM borate buffer (pH 8.0) to a final concentration of .apprx.20  $\mu\text{g/mL}$ . To the nucleic acid solution I in aqueous solution was added to a final concentration of 10  $\mu\text{g/mL}$ . The mixture was then irradiated at long wavelength irradiation for .apprx.60 min using a black ray UVL 56 lamp. The labeled test sample was hybridized with probes immobilized on a nitrocellulose strip at 42° for 16 h and the biotinylated hybrids were detected by a colorimetric or chemiluminescence method.

L9 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:164418 CAPLUS  
 DOCUMENT NUMBER: 108:164418  
 ORIGINAL REFERENCE NO.: 108:26955a,26958a  
 TITLE: Preparation and use of reagents for a single probe solution-phase hybridization assay for the detection of a nucleotide sequence, and kits containing the reagents  
 INVENTOR(S): Dattagupta, Nanibhushan  
 PATENT ASSIGNEE(S): Molecular Diagnostics, Inc., USA  
 SOURCE: Eur. Pat. Appl., 50 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 237833	A2	19870923	EP 1987-102576	19870224
EP 237833	A3	19910116		
EP 237833	B1	19930113		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE				
CA 1290664	C	19911015	CA 1986-526423	19861229
NO 8700612	A	19870907	NO 1987-612	19870217
AT 84574	T	19930115	AT 1987-102576	19870224
ES 2053457	T3	19940801	ES 1987-102576	19870224
FI 8700922	A	19870906	FI 1987-922	19870303
DK 8701121	A	19870906	DK 1987-1121	19870304
ZA 8701555	A	19871125	ZA 1987-1555	19870304
AU 8769724	A	19870910	AU 1987-69724	19870305
JP 62282599	A	19871208	JP 1987-51170	19870305
US 4968602	A	19901106	US 1989-442423	19891121
PRIORITY APPLN. INFO.:			US 1986-836360	A 19860305
			US 1986-927613	A 19861114
			EP 1987-102576	A 19870224

AB A particular nucleic acid sequence of clin. significance can be rapidly determined by a homogeneous single-probe hybridization assay. The test sample containing chemical modified nucleic acids having a label (or a reactive site) will hybridize with a nucleic acid probe carrying a reactive site (or a label). The hybrids are selectively separated out by contacting then with an immobilized reactive partner. The hybrid and the reactive partner form a stable bond, and the extent of hybridization can be measured by determining the



label in the immobilized fraction or a decrease in the label in the remaining solution. The homogeneous single-probe hybridization method, as described above, was employed to detect the presence of  $\alpha$ -thalassemia in prenatal samples (no data). The sample nucleic acid and the probe were labeled photochem. with biotin and 4'-aminomethyl-4,5' di-Me angelicin, resp.

L9 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1989:520873 CAPLUS  
DOCUMENT NUMBER: 111:120873  
ORIGINAL REFERENCE NO.: 111:20145a,20148a  
TITLE: Treatment of anemia associated with rheumatoid arthritis by increasing blood thyroxine levels, especially using Zanthoxylum simulans extract  
INVENTOR(S): Cheng, Theodore  
PATENT ASSIGNEE(S): USA  
SOURCE: U.S., 3 pp. Cont.-in-part of U.S. Ser. No. 710,628, abandoned.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
US 4767626	A	19880830	US 1986-836204	19860227
PRIORITY APPLN. INFO.:			US 1985-710628	A2 19850311
AB	Anemia associated with viral and bacterial infection in patients with rheumatoid arthritis is treated by administration of a composition which increases thyroxine in the blood stream of the patient, thus increasing stem cells in the blood stream. The composition preferably comprises fat-soluble alkaloid exts. from Zanthoxylum simulans roots. Root- and stem-bark, leaves, and berries of Z. simulans were milled and 150 g of this product was extracted with 3 L MeOH to give dark crystals which contained a major fraction of chelerythrine, and minor fractions of dihydrochelerythrine, oxychelerythrine, N-acetylanonaine, skimmianine, fagarine, sitosterol, sesamin, and 8-methoxy-N-methylflindersine. This extract (50 g) was mixed with EtOH 10 mL, 70% aqueous sorbitol 50, Na CM-cellulose 6, Na saccharide 2, anethol 0.2, and water 50 g. An antiinflammatory agent, especially 2% ibuprofen, was optionally added to treat the combined symptoms of anemia and joint inflammation.			

L9 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2005:237804 CAPLUS  
DOCUMENT NUMBER: 142:285155  
TITLE: Pharmaceutical compositions and processed foods containing lactoferrin and other active ingredients  
INVENTOR(S): Ando, Kunio  
PATENT ASSIGNEE(S): NRL Pharma, Inc., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 2005068060	A	20050317	JP 2003-299214	20030822
PRIORITY APPLN. INFO.:			JP 2003-299214	20030822
AB	Antiarthritic agents and processed foods contain lactoferrin (I) and $\geq 1$ other active ingredients chosen from vitamin C, E, D, folic			

acid, (in)organic Ca salts, glucosamine sulfate, chondroitin sulfate,  $\gamma$ -linolenic acid (II), eicosapentadecanoic acid (sic), docosahexaenoic acid, other  $\omega$ -3 essential fatty acids, colostrum powder, its protein concentrate, red pepper exts., capsaicin, ginger exts., etc.

Antiallergy agents and processed foods contain I and  $\geq 1$  other active ingredients chosen from vitamin C, II,  $\omega$ -3 essential fatty acids, flavonoids, glycyrrhizin, licorice exts., etc. Antianemic agents and processed foods contain I and  $\geq 1$  other active ingredients chosen from vitamin B12, folic acid, Fe gluconate, heme Fe, etc. Also claimed are anti-Alzheimer's, antitumor, hypocholesterolemic, antiarteriosclerotic, antidepressant, antihypertensive, antiobesity agents, etc. I and other active ingredients show synergistic or additive therapeutic effects (no data).

L9 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:780671 CAPLUS

DOCUMENT NUMBER: 141:296010

TITLE: Preparation of substituted pyrazoles as modulators of ATP-binding cassette transporters

INVENTOR(S): Vangoor, Frederick F.; Hadida Ruah, Sarah S.; Singh, Ashvani K.; Olson, Eric R.; Makings, Lewis R.; Gonzalez, Jesus E., III; Rader, James A.; Chambers, Fred, III; Miller, Mark T.; Grootenhuys, Peter; Liu, Yahua

PATENT ASSIGNEE(S): Vertex Pharmaceuticals Incorporated, USA

SOURCE: PCT Int. Appl., 174 pp.

CODEN: PIXXD2

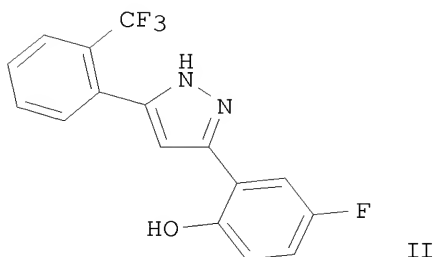
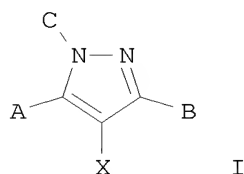
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004080972	A1	20040923	WO 2004-US7492	20040312
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 20050113423	A1	20050526	US 2004-800022	20040312
EP 1601657	A1	20051207	EP 2004-720345	20040312
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
PRIORITY APPLN. INFO.:			US 2003-453978P	P 20030312
			WO 2004-US7492	W 20040312
OTHER SOURCE(S):		MARPAT 141:296010		
GI				



AB Pyrazoles I [A, B = (un)substituted aryl, heterocyclyl, cycloalkyl; C = H, (un)substituted aryl, heterocyclyl, heteroaryl, cycloalkyl, alkyl, alkylcarbonyl, arylcarbonyl, heteroarylcarbonyl, heterocyclylcarbonyl, or aminocarbonyl; X = H, (un)substituted alkyl, aryl, heterocyclyl, heteroaryl, or  $\omega$ -substituted n-alkyl] such as II are prepared as inhibitors of ATP-binding cassette (ABC) transporters such as the cystic fibrosis transmembrane conductance regulator (CFTR) for use in the treatment of conditions such as cystic fibrosis, immunodeficiency, inflammatory disease, chronic obstructive pulmonary disease, chronic pancreatitis, or pneumonia. 4-Trifluoromethylbenzoyl chloride and 2-hydroxy-5-fluoroacetophenone are stirred in pyridine for 12 h, after which potassium hydroxide is added and the mixture stirred for 12 h;

addition

of hydrazine hydrate to a solution of the product obtained in the first step in ethanol and heating at reflux for 3 h yields II in 30% overall yield as a yellow crystalline solid. II modulates  $\Delta F508$ -CFTR at  $\geq 75\%$  of the effect of genistein on the same receptor. Data on the relative modulation of  $\Delta F508$ -CFTR by some compds. of the invention as compared to genistein is provided.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1992:56598 CAPLUS

DOCUMENT NUMBER: 116:56598

ORIGINAL REFERENCE NO.: 116:9751a,9754a

TITLE: Defective DNA endonuclease activities in Fanconi's anemia cells, complementation groups A and B

AUTHOR(S): Lambert, Muriel W.; Tsongalis, Gregory J.; Lambert, W. Clark; Hang, Bo; Parrish, David D.

CORPORATE SOURCE: New Jersey Med. Sch., UMDNJ, Newark, NJ, 07103, USA

SOURCE: Mutation Research, DNA Repair (1991), 273(1), 57-71  
CODEN: MRDRBE; ISSN: 0921-8777

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Cells from patients with the inherited disorder, Fanconi's anemia (FA), were analyzed for endonucleases which recognize DNA interstrand cross-links and monoadducts produced by psoralen plus UVA irradiation. Two chromatin-associated DNA endonuclease activities, defective in their ability to incise DNA-containing adducts produced by psoralen plus UVA light, have been identified and isolated in nuclei of FA cells. In FA complementation group A (FA-A) cells, one endonuclease activity, pI 4.6, which recognizes psoralen intercalation and interstrand cross-links, has 25% of the activity of the normal human endonuclease, pI 4.6, on 8-methoxypsoralen (8-MOP) plus UVA-damaged DNA. In FA complementation group B (FA-B) cells, a second endonuclease activity, pI 7.6, which recognizes psoralen monoadducts, has 50% and 55% of the activity, resp., of the corresponding normal endonuclease on 8-MOP or angelicin plus UVA-damaged DNA. Kinetic anal. reveals that both the FA-A endonuclease activity, pI 4.6, and the FA-B endonuclease activity, pI 7.6, have decreased affinity for psoralen plus UVA-damaged DNA. Both the normal and FA endonucleases showed .apprx.2.5-fold increase in activity on psoralen plus UVA-damaged reconstituted nucleosomal DNA compared to damaged non-nucleosomal DNA,

indicating that interaction of these FA endonucleases with nucleosomal DNA is not impaired. These deficiencies in two nuclear DNA endonuclease activities from FA-A and FA-B cells correlate with decreased levels of unscheduled DNA synthesis (UDS), in response to 8-MOP or angelicin plus UVA irradiation, in these cells in culture.

L9 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2002:638196 CAPLUS  
 DOCUMENT NUMBER: 137:165813  
 TITLE: Methods and compositions for analyzing nucleic acids  
 INVENTOR(S): Dattagupta, Nanibhushan  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 15 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20020115074	A1	20020822	US 2001-791030	20010220
US 6620586	B2	20030916		
WO 2002070749	A2	20020912	WO 2002-US3782	20020205
WO 2002070749	A3	20070531		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, AP, EA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, EP, OA				
AU 2002311759	A1	20020919	AU 2002-311759	20020205
US 20030211532	A1	20031113	US 2003-458606	20030609
PRIORITY APPLN. INFO.:			US 2001-791030	A 20010220
			WO 2002-US3782	W 20020205

AB The present invention relates to methods and compns. for analyzing nucleic acids. In particular, the invention provides for methods and combinations for analyzing nucleic acids in a plurality of samples using a plurality of detectably different signature labels and a probe that is hybridizable to each of the target nucleic acids. The invention also provides for a method for quantifying a nucleic acid by analyzing the amount of a label, e.g., a photoactivatable label, attached to the target nucleic acid.

L9 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2008:850726 CAPLUS  
 TITLE: Furocoumarins photolysis products induce differentiation of human erythroid cells  
 AUTHOR(S): Viola, Giampietro; Vedaldi, Daniela; Dall'Acqua, Francesco; Lampronti, Ilaria; Bianchi, Nicoletta; Zuccato, Cristina; Borgatti, Monica; Gambari, Roberto  
 CORPORATE SOURCE: Department of Pharmaceutical Sciences, University of Padova, Via Marzolo 5, University of Padova, Padua, 35131, Italy  
 SOURCE: Journal of Photochemistry and Photobiology, B: Biology (2008), 92(1), 24-28  
 CODEN: JPPBEG; ISSN: 1011-1344  
 PUBLISHER: Elsevier B.V.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Psoralens, also known as furocoumarins, are a well-known class of photosensitizers largely used in the therapy of various skin disease. In this study we have evaluated the effects of crude pre-irradiated solns. of

furocoumarins derivs. on (a) erythroid differentiation and apoptosis of human leukemic K562 cells and (b) Hb synthesis in cultures of human erythroid progenitors derived from the peripheral blood. To prove the activity of a mixture of photoproducts generated by UVA irradiation of the three

psoralen derivs. 5-methoxypsoralen (5-MOP) 8-methoxypsoralen (8-MOP), and angelicin (ANG), we employed the human leukemic K562 cell line and the two-phase liquid culture procedure for growing erythroid progenitors. The results obtained demonstrate that pre-irradiated solns. of psoralen derivs. significantly induce erythroid differentiation of K562 cells irresp. of the type of derivative used, suggesting that the active photoproduct(s) share a common structure. Interestingly, solns. of psoralens irradiated in anaerobic conditions do not exhibit erythroid inducing ability, indicating that the effect is mostly due to photooxidized psoralen products. In erythroid precursor cells, psoralens photolysis products stimulates at low concns. an increase of Hb A and Hb F. Altogether, these data suggest that photoproducts of psoralen warrant further evaluation as potential therapeutic drugs in  $\beta$ -thalassemia and sickle cell anemia.